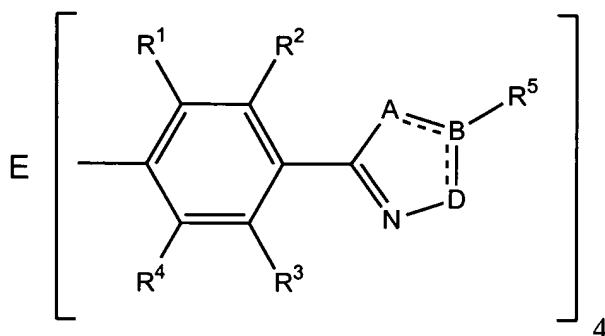


Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1. (currently amended) A compound of the following formula:



wherein

each of R¹-R⁴ is, independently, H, substituted or unsubstituted C₁₋₆ alkyl, OH, C₁₋₆ alkoxy, N(R⁶)(R⁷), in which each of R⁶ and R⁷ is, independently, H or substituted or unsubstituted C₁₋₆ alkyl, NO₂, CN, or CO₂R⁸, in which R⁸ is H or C₁₋₆ alkyl; and

wherein R⁵ is H, substituted or unsubstituted C₁₋₆ alkyl, substituted or unsubstituted C₂₋₆ alkenyl, substituted or unsubstituted C₂₋₆ alkynyl, unsubstituted C₆₋₂₀ aryl or C₆₋₂₀ aryl substituted with OH, C₁₋₆ alkoxy, N(R²⁶)(R²⁷), alkylaryl in which the ~~alkyl~~ aryl moiety is substituted with one or more substituted C₁₋₆ alkyl groups further substituted with hydroxyl, protected hydroxyl, amino, protected amino, carboxy, protected carboxy, alkoxy, halo, CN, or NO₂, substituted or unsubstituted C₄₋₂₀ heteroaryl, C₁₀₋₂₀ diarylaminoaryl, or is absent, or B and D, together with R⁵ and R¹¹, are substituted or unsubstituted aryl; in which each of R²⁶ and R²⁷ is, independently, H, substituted or unsubstituted C₁₋₆ alkyl, substituted or unsubstituted aryl, substituted or unsubstituted alkylaryl, NO₂, CN, or CO₂R²⁸, in which R²⁸ is H or C₁₋₆ alkyl.

wherein A is O, S, N(R⁹) in which R⁹ is absent, H, substituted or unsubstituted alkyl, or substituted or unsubstituted aryl, N=N, or N=C(R¹⁰) in which the C is adjacent to B and in which R¹⁰ is substituted or unsubstituted alkyl, or substituted or unsubstituted aryl;

wherein B is C or N;

wherein D is N, NH, or C(R¹¹) in which R¹¹ is substituted or unsubstituted alkyl, or substituted or unsubstituted aryl, or B and D, together with R⁵ and R¹¹ are substituted or unsubstituted aryl;

and wherein E is C or Si;

provided that when A is O and D is N, then B is C and the floating double bond is between B and D;

further provided that when A is N(R⁹) and R⁹ is absent, then B is N, R⁵ is absent, D is NH, and the floating double bond is between A and B;

further provided that when A is N=N, then B is C, D is N, and the floating double bond is between B and D;

further provided that when A is N=C(R¹⁰), then B is N, R⁵ is absent, D is C(R¹¹), and the floating double bond is between B and D;

further provided that when A is N(R⁹) and R⁹ is H, alkyl, or aryl, then B is C, D is C(R¹¹), and the floating double bond is between B and D;

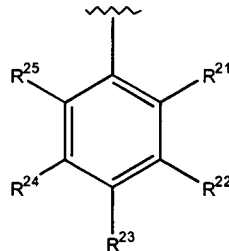
further provided that when A is O or S and D is C(R¹¹), then B is C and the floating double bond is between B and D.

2. (original) The compound of claim 1, wherein A is O.

3. (original) The compound of claim 2, wherein each of R¹-R⁴ is H.

4. (currently amended) The compound of claim 2, wherein R⁵ is unsubstituted C₆₋₂₀ aryl or C₆₋₂₀ aryl substituted with OH, C₁₋₆ alkoxy, N(R²⁶)(R²⁷), or alkylaryl in which the ~~alkyl~~ aryl moiety is substituted with one or more substituted C₁₋₆ alkyl groups further substituted with hydroxyl, protected hydroxyl, amino, protected amino, carboxy, protected carboxy, alkoxy, halo, CN, or NO₂; in which each of R²⁶ and R²⁷ is, independently, H, substituted or unsubstituted C₁₋₆ alkyl, substituted or unsubstituted aryl, substituted or unsubstituted alkylaryl, NO₂, CN, or CO₂R²⁸, in which R²⁸ is H or C₁₋₆ alkyl.

5. (currently amended) The compound of claim 4, wherein R^5 has the following formula:



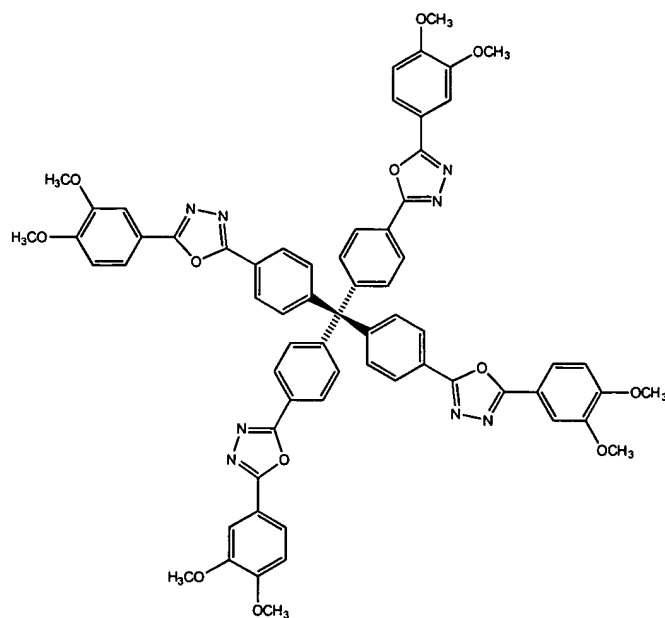
wherein each of R^{21} - R^{25} is, independently, H, ~~substituted or unsubstituted~~ C_{1-6} alkyl groups further substituted with hydroxyl, protected hydroxyl, amino, protected amino, carboxy, protected carboxy, alkoxy, halo, CN, or NO_2 ; OH, C_{1-6} alkoxy, $N(R^{26})(R^{27})$, in which each of R^{26} and R^{27} is, independently, H, substituted or unsubstituted C_{1-6} alkyl, substituted or unsubstituted aryl, substituted or unsubstituted alkylaryl, NO_2 , CN, or CO_2R^{28} , in which R^{28} is H or C_{1-6} alkyl.

6. (original) The compound of claim 5, wherein each of R^{21} - R^{25} is, independently, H or methoxy.

7. (canceled)

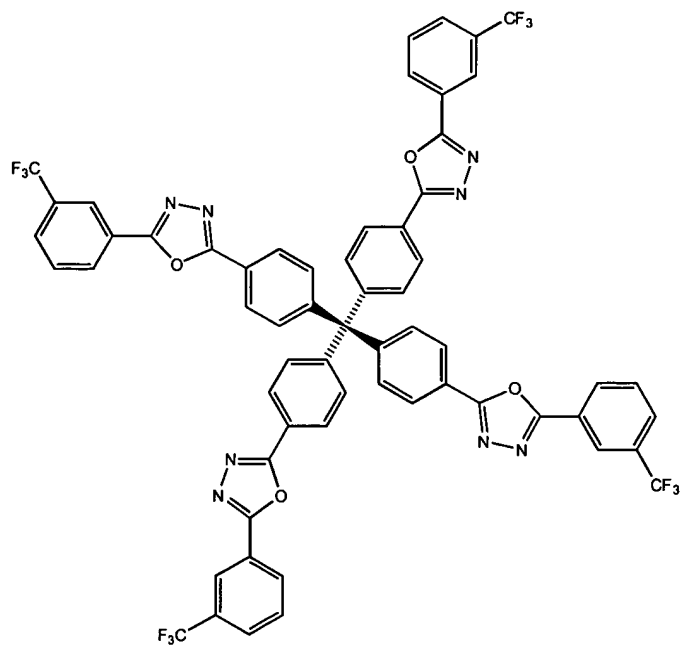
8. (original) The compound of claim 5, wherein each of R^{21} - R^{25} is, independently, H or trifluoromethyl.

9. (original) The compound of claim 1, wherein the compound has the following formula:



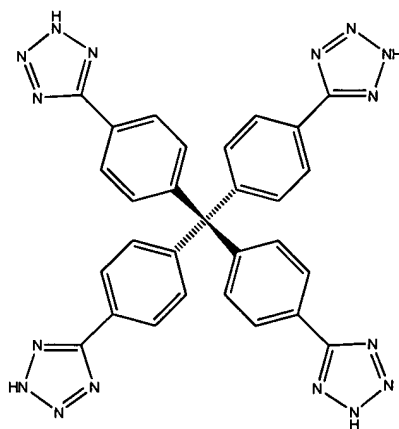
10. (canceled)

11. (original) The compound of claim 1, wherein the compound has the following formula:

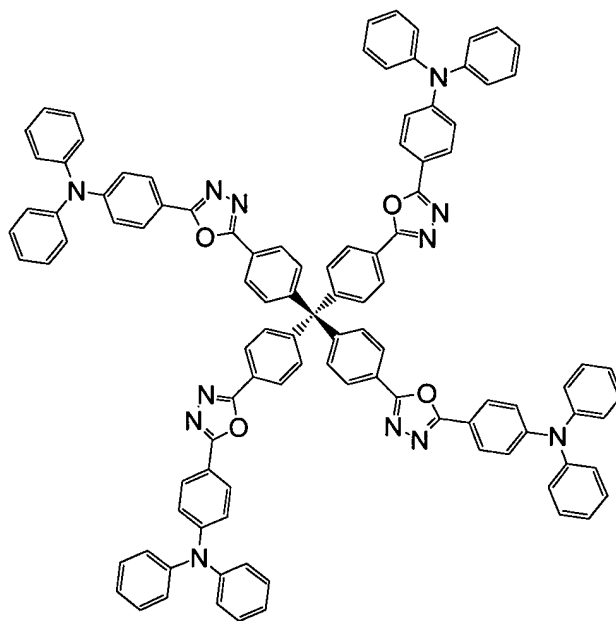


12. (original) The compound of claim 1, wherein A is $N(R^9)$, in which R^9 is absent.

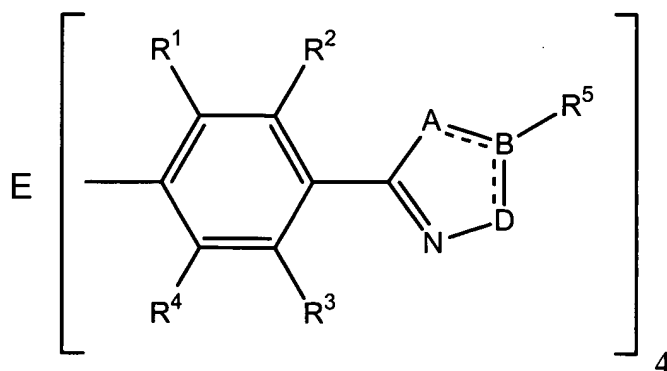
13. (original) The compound of claim 12, wherein the compound has the following formula:



14. (original) The compound of claim 1, wherein the compound has the following formula:



15. (currently amended) An electroluminescence device comprising a substrate, a hole transporting layer, an emitting layer, and an electron transporting layer, wherein at least one of the hole transporting layer, the emitting layer, and the electron transporting layer comprises a compound having the following formula:



wherein

each of R¹-R⁴ is, independently, H, substituted or unsubstituted C₁₋₆ alkyl, OH, C₁₋₆ alkoxy, N(R⁶)(R⁷), in which each of R⁶ and R⁷ is, independently, H or substituted or unsubstituted C₁₋₆ alkyl, NO₂, CN, or CO₂R⁸, in which R⁸ is H or C₁₋₆ alkyl; and

wherein R⁵ is H, substituted or unsubstituted C₁₋₆ alkyl, substituted or unsubstituted C₂₋₆ alkenyl, substituted or unsubstituted C₂₋₆ alkynyl, unsubstituted C₆₋₂₀ aryl or C₆₋₂₀ aryl substituted with OH, C₁₋₆ alkoxy, N(R²⁶)(R²⁷), alkylaryl in which the ~~alkyl~~ aryl moiety is substituted with one or more substituted C₁₋₆ alkyl groups further substituted with hydroxyl, protected hydroxyl, amino, protected amino, carboxy, protected carboxy, alkoxy, halo, CN, or NO₂, substituted or unsubstituted C₄₋₂₀ heteroaryl, C₁₀₋₂₀ diarylaminoaryl, or is absent, or B and D, together with R⁵ and R¹¹, are substituted or unsubstituted aryl; in which each of R²⁶ and R²⁷ is, independently, H, substituted or unsubstituted C₁₋₆ alkyl, substituted or unsubstituted aryl, substituted or unsubstituted alkylaryl, NO₂, CN, or CO₂R²⁸, in which R²⁸ is H or C₁₋₆ alkyl;

wherein A is O, S, N(R⁹) in which R⁹ is absent, H, substituted or unsubstituted alkyl, or substituted or unsubstituted aryl, N=N, or N=C(R¹⁰) in which the C is adjacent to B and in which R¹⁰ is substituted or unsubstituted alkyl, or substituted or unsubstituted aryl;

wherein B is C or N;

wherein D is N, NH, or C(R¹¹) in which R¹¹ is substituted or unsubstituted alkyl, or substituted or unsubstituted aryl, or B and D, together with R⁵ and R¹¹ are substituted or unsubstituted aryl;

and wherein E is C or Si;

provided that when A is O and D is N, then B is C and the floating double bond is between B and D;

further provided that when A is N(R⁹) and R⁹ is absent, then B is N, R⁵ is absent, D is NH, and the floating double bond is between A and B;

further provided that when A is N=N, then B is C, D is N, and the floating double bond is between B and D;

further provided that when A is N=C(R¹⁰), then B is N, R⁵ is absent, D is C(R¹¹), and the floating double bond is between B and D;

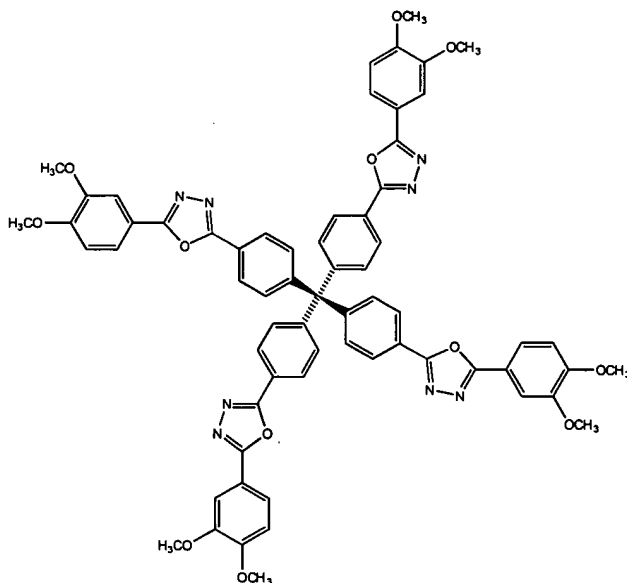
further provided that when A is N(R⁹) and R⁹ is H, alkyl, or aryl, then B is C, D is C(R¹¹), and the floating double bond is between B and D;

further provided that when A is O or S and D is C(R¹¹), then B is C and the floating double bond is between B and D.

16. (original) The device of claim 15, wherein A is O, B is C, and D is N.

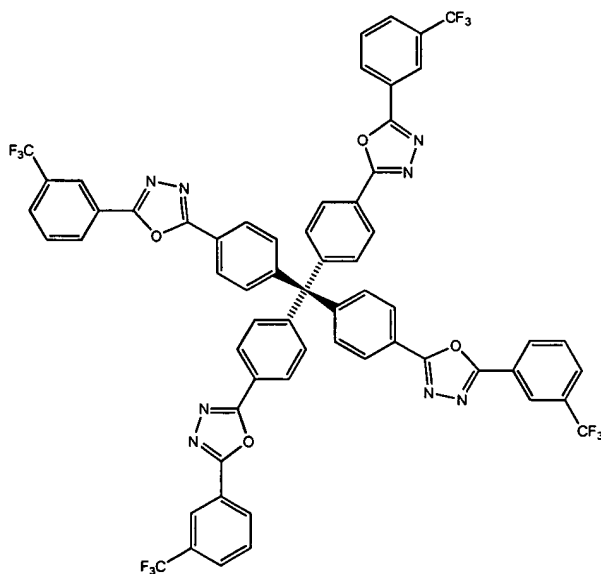
17. (original) The device of claim 16, wherein each of R¹-R⁴ is H.

18. (original) The device of claim 15, wherein the compound has the following formula:



19. (canceled)

20. (original) The device of claim 15, wherein the compound has the following formula:



21. (original) The device of claim 15, wherein the compound has the following formula:

